

# Notice of Allowability

Application No.

09/820,088

Examiner

Miranda Le

Applicant(s)

DEBIQUE ET AL.

Art Unit

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Appeal Brief filed 09/28/06.
2. ☒ The allowed claim(s) is/are 1, 2, 4, 6, 8-12, 14, 16-19, 21-24, 26-28, 31-48, now renumbered as 1-39.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

Miranda Le  
December 08, 2006

**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Applicant's representative, Mr. Rocco L. Adornato, on November 29, 2006.

The application has been amended as follows:

**In the claims:**

1. (Currently Amended) A computer-implemented method comprising:

maintaining meta data associated with a plurality of pieces of content stored on a plurality of pieces of media;

maintaining meta data associated with another plurality of pieces of content, wherein each of the other plurality of pieces of content is a ripped version of a respective one of the plurality of pieces of content in the corresponding one of the plurality of pieces of content; ~~and~~

automatically altering the meta data associated with one of the other plurality of pieces of content in response to the meta data associated with the corresponding one of the plurality of pieces of content being altered;

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receiving an identification of a set of content selected from the plurality of pieces of content;

obtaining table of contents information from a disc on which all of the set of content is stored;

generating a disc identifier based at least in part on the table of contents information;

identifying meta data corresponding to the set of content;

generating a new storage structure, corresponding to the disc, and including the identified meta data; and

saving an indication of the altered meta data.

2. (Currently Amended) A computer-implemented method as recited in claim 1, wherein each of the plurality of pieces of content is a track of a compact disc (CD).

3. (Cancel).

4. (Currently Amended) A computer-implemented method as recited in claim 1, wherein each of the other plurality of pieces of content is stored on a local hard drive.

5. (Cancel).

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6. (Currently Amended) A computer-implemented method as  
recited in claim 1, further comprising:

maintaining a set of disc identifiers;

for each disc identifier, maintaining a set of children objects, wherein each  
of the children objects corresponds to one of the plurality of pieces of content; and

for each of one or more of the individual children objects, maintaining a set  
of additional objects, wherein each additional object corresponds to one of the  
other plurality of pieces of content.

7. (Cancel).

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8. (Currently Amended) One or more computer-readable memories containing a computer program that is executable by a processor to perform the acts of:

maintaining meta data associated with a plurality of pieces of content stored on a plurality of pieces of media;

maintaining meta data associated with another plurality of pieces of content, wherein each of the other plurality of pieces of content is a ripped version of a respective one of the plurality of pieces of content in the corresponding one of the plurality of pieces of content; and

automatically altering the meta data associated with one of the other plurality of pieces of content in response to the meta data associated with the corresponding one of the plurality of pieces of content being altered;

receiving an identification of a set of content selected from the plurality of pieces of content;

obtaining table of contents information from a disc on which all of the set of content is stored;

generating a disc identifier based at least in part on the table of contents information;

identifying meta data corresponding to the set of content;

generating a new storage structure, corresponding to the disc, and including the identified meta data; and

saving an indication of the altered meta data.

9. (Currently Amended) One or more computer-readable storage media having stored thereon a plurality of instructions that, when executed by one or more processors of a computer, causes the one or more processors to perform the following acts:

receiving an identification of a change to be made to meta data corresponding to a particular piece of content on a particular piece of media;

changing, based on the identification, meta data corresponding to the particular piece of content;

automatically identifying one or more other pieces of content associated with the particular piece of content, wherein the other pieces of content are ripped versions of the particular piece of content; and

changing, based on the identification, meta data corresponding to the one or more other pieces of content;

receiving another identification of a change to be made to meta data, wherein the other identification is a change to be made to one of the other pieces of content;

automatically changing, based on the other identification, the meta data corresponding to the one of the other pieces of content;

automatically changing, based on the identification, the meta data corresponding to the particular piece of content;

automatically changing, based on the other identification, the meta data corresponding to the others of the one or more other pieces of content; and

saving an indication of the changed meta data.

10. (Currently Amended) One or more computer-readable storage media as recited in claim 9, wherein the particular piece of content on the particular piece of media comprises a particular song on a particular compact disc (CD).

11. (Currently Amended) One or more computer-readable storage media as recited in claim 9, wherein the identification includes new meta data and wherein changing the meta data corresponding to the particular piece of content comprises overwriting any previous meta data corresponding to the particular piece of content with the new meta data.

12. (Currently Amended) One or more computer-readable storage media as recited in claim 9, wherein the particular piece of content comprises an audio track and wherein the other pieces of content comprise different versions of the audio track.

13. (Cancel).

14. (Currently Amended) One or more computer-readable storage media as recited in claim 9, wherein original meta data associated with the particular piece of content comprises meta data received from a remote server, and wherein the change to be made to the meta data corresponding to the particular piece of content comprises new meta data received from a user.

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15. (Cancel).

16. (Currently Amended) One or more computer-readable storage media as recited in claim 9, wherein the plurality of instructions further causes the one or more processors to perform the following acts:

maintaining an indication of a source of the change to the meta data corresponding to the particular piece of content;

maintaining an indication of a source of the change to the meta data corresponding to each of the one or more other pieces of content;

automatically receiving an identification of another change to be made to meta data corresponding to the particular piece of content;

checking whether the source of the change to the meta data corresponding to the particular piece of content was a user;

changing, based on the identification of the other change, meta data corresponding to the particular piece of content if the source of the change to the meta data corresponding to the particular piece of content was the user;

checking whether the source of the change to the meta data corresponding to the one or more other pieces of contents was the user; and

automatically changing, based on the identification of the other change, meta data corresponding to the one or more other pieces of content if the source of the change to the meta data corresponding to the one or more other pieces of contents was the user.



17. (Currently Amended) A system comprising:

a disc drive configured to have a removable disc inserted therein, wherein the removable disc includes a plurality of pieces of content;

a local storage device configured to store another plurality of pieces of content, wherein each of the other plurality of pieces of content corresponds to one of the plurality of pieces of content and is a copied version of the data in the corresponding one of the plurality of pieces of content; and

a meta data management module, configured to:

maintain meta data associated with a plurality of pieces of content stored on the removable disc;

maintain meta data associated with another plurality of pieces of content, wherein each of the other plurality of pieces of content is a ripped version of a respective one of the plurality of pieces of content in the corresponding one of the plurality of pieces of content;

automatically alter the meta data associated with one of the other plurality of pieces of content in response to the meta data associated with the corresponding one of the plurality of pieces of content being altered;

receive an identification of a set of content selected from the plurality of pieces of content;

obtain table of contents information from the disc, wherein the disc stores all of the set of content;

generate a disc identifier based at least in part on the table of contents information;  
identify meta data corresponding to the set of content;  
generate a new storage structure, corresponding to the disc, and including the identified meta data; and  
save an indication of the altered meta data~~alter meta data associated with one of the other plurality of pieces of content in response to meta data associated with the corresponding one of the plurality of pieces of content being altered.~~

18. (Original) A system as recited in claim 17, wherein the local storage device is further configured to store both meta data associated with the plurality of pieces of content and meta data associated with the other plurality of pieces of content.

19. (Currently Amended) One or more computer-readable storage media having stored thereon a plurality of instructions that, when executed by one or more processors of a computer, cause the one or more processors to perform the following acts:

receiving an identification of a plurality of tracks on a disc;

obtaining table of contents information from the disc;

generating a disc identifier based at least in part on the table of contents information;

accessing a local meta data store to identify meta data corresponding to the tracks copied on another disc; and

generating a new storage structure, corresponding to the disc, and including the identified meta data;

automatically receiving another identification of a change to be made to meta data, wherein the other identification is a change to be made to one of the other pieces of content;

changing, based on the other identification, the meta data corresponding to the one of the other pieces of content;

changing, based on the identification, the meta data corresponding to the particular piece of content;

changing, based on the other identification, the meta data corresponding to the others of the one or more other pieces of content; and

saving an indication of a relationship between the plurality of tracks on the disc and corresponding to tracks associated with the other disc.

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20. (Cancel).

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21. (Currently Amended) A computer-implemented method comprising:

receiving a notification of a new piece of media, wherein the new piece of media includes a plurality of pieces of content that are selected by a user for inclusion on the new piece of media, and wherein the user selection is based on one or more other pieces of content associated with one or more other pieces of media, and wherein further the one or more other pieces of content include copied versions of the plurality of pieces of content;

generating a media identifier corresponding to the new piece of media;

automatically identifying, from a meta data store, meta data corresponding to the plurality of pieces of content and associated with the one or more other pieces of content; and

saving, as meta data corresponding to the new piece of media, the identified meta data;

receiving an identification of a set of content selected from the plurality of pieces of content;

obtaining table of contents information from a disc on which all of the set of content is stored;

generating a disc identifier based at least in part on the table of contents information;

identifying meta data corresponding to the set of content;

generating a new storage structure, corresponding to the disc, and including the identified meta data; and

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saving an indication of a relationship between content on the new piece of media and the corresponding one or more other pieces of content.

22. (Currently Amended) A computer-implemented method as recited in claim 21, wherein the new piece of media comprises a compact disc (CD).

23. (Currently Amended) A computer-implemented method as recited in claim 21, wherein each of the plurality of pieces of content comprises a song.

24. (Currently Amended) A computer-implemented method as recited in claim 21, wherein generating the media identifier comprises:

obtaining table of contents information for the new piece of media; and

calculating, based at least in part on the table of contents information, the media identifier corresponding to the new piece of media.

25. (Cancel).

26. (Currently Amended) One or more computer-readable memories containing a computer program that is executable by a processor to perform acts of:

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receiving a notification of a new piece of media, wherein the new piece of media includes a plurality of pieces of content that are selected by a user for inclusion on the new piece of media, and wherein the user selection is based on one or more other pieces of content associated with one or more other pieces of media, and wherein further the one or more other pieces of content include copied versions of the plurality of pieces of content;

generating a media identifier corresponding to the new piece of media;

automatically identifying, from a meta data store, meta data corresponding to the plurality of pieces of content and associated with the one or more other pieces of content; and

saving, as meta data corresponding to the new piece of media, the identified meta data;

receiving an identification of a set of content selected from the plurality of pieces of content;

obtaining table of contents information from a disc on which all of the set of content is stored;

generating a disc identifier based at least in part on the table of contents information;

identifying meta data corresponding to the set of content;

generating a new storage structure, corresponding to the disc, and including the identified meta data; and

saving an indication of a relationship between content on the new piece of media and the corresponding one or more other pieces of content.

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27. (Currently Amended) A computer-implemented method of managing meta data corresponding to media content, the method comprising:

maintaining a set of disc identifiers;

for each disc identifier, maintaining a set of corresponding children objects, wherein each of the children objects corresponds to a track on the disc associated with the disc identifier;

for each of one or more of the individual children objects, maintaining a set of additional objects, wherein each additional object corresponds to a file associated with the track corresponding to the child object; and

associating, for each of the one or more individual children objects, the set of additional objects with the child object, wherein the set of additional objects correspond respectively to a copy of an associated one of the tracks;

receiving an indication to change meta data associated with one track on the disc;

automatically altering, in response to the indication, meta data associated with the child object corresponding to the one track;

automatically altering, in response to the indication, meta data associated with the additional object corresponding to the child object corresponding to the track; and

propagating, to the set of additional objects, any changes made to meta data corresponding to the child object.



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28. (Currently Amended) A computer-implemented method as recited in claim 27, further comprising associating meta data with each child object and each additional object.

29. (Cancel).

30. (Cancel).

31. (Currently Amended) A computer-implemented method as recited in claim 27, wherein one or more disc identifiers in the set of disc identifiers is a compact disc (CD) identifier.

32. (Currently Amended) A computer-implemented method as recited in claim 27, wherein one or more disc identifiers in the set of disc identifiers is a digital versatile disc (DVD) identifier.

33. (Currently Amended) One or more computer-readable memories containing a computer program that is executable by a processor to manage meta data corresponding to media content by performing acts of:

maintaining a set of disc identifiers;

for each disc identifier, maintaining a set of corresponding children objects, wherein each of the children objects corresponds to a track on the disc associated with the disc identifier;

for each of one or more of the individual children objects, maintaining a set of additional objects, wherein each additional object corresponds to a file associated with the track corresponding to the child object; and

automatically associating, for each of the one or more individual children objects, the set of additional objects with the child object, wherein the set of additional objects correspond respectively to a copy of an associated one of the tracks;

receiving an indication to change meta data associated with one track on the disc;

automatically altering, in response to the indication, meta data associated with the child object corresponding to the one track;

automatically altering, in response to the indication, meta data associated with the additional object corresponding to the child object corresponding to the track; and

propagating, to the set of additional objects, any changes made to meta data corresponding to the child object.

34. (Currently Amended) One or more computer-readable memories containing a computer program that is executable by a processor to perform the acts of~~A computer-readable medium having stored thereon a data structure, comprising:~~

maintaining a set of disc identifiers;

for each disc identifier, maintaining a set of corresponding children objects, wherein each of the children objects corresponds to a content track on the disc associated with the disc identifier;

for each of one or more of the individual children objects, maintaining a set of additional objects, wherein each additional object corresponds to a file associated with the content track corresponding to the child object;

automatically associating, for each of the one or more individual children objects, the set of additional objects with the child object, wherein the set of additional objects correspond respectively to a copy of an associated one of the content tracks; and receiving an indication to change meta data associated with one track on the disc;

automatically altering, in response to the indication, meta data associated with the child object corresponding to the one track;

automatically altering, in response to the indication, meta data associated with the additional object corresponding to the child object corresponding to the track; and

propagating, to the set of additional objects, any changes made to meta data corresponding to the child object.

wherein the meta data is stored on a computer-readable medium having a data structure comprising:

a set of entries identifying objects;

another set of entries identifying relationships between selected ones of the objects identified in the set with selected others of the objects, wherein the selected others of the objects are copies of corresponding ones of the objects; and

an additional set of entries identifying meta data associated with individual objects.

35. (Currently Amended) A computer-readable ~~medium~~ memory as recited in claim 34, wherein each set of entries is implemented as a different table in a database.

36. (Currently Amended) A computer-readable memory ~~medium~~ as recited in claim 34, wherein the set of entries also associates the objects with identifiers.

37. (Currently Amended) A computer-readable memory ~~medium~~ as recited in claim 34, wherein the other set of entries identifies the relationships based on the identifiers associated with the objects.

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38. (Currently Amended) A computer-implemented method comprising:

maintaining meta data associated with a plurality of pieces of content stored on a plurality of pieces of media;

maintaining meta data associated with another plurality of pieces of content, wherein each of the other plurality of pieces of content is a ripped version of a respective one of the plurality of pieces of content in the corresponding one of the plurality of pieces of content;

automatically altering the meta data associated with one of the other plurality of pieces of content in response to the meta data associated with the corresponding one of the plurality of pieces of content being altered;

receiving an indication of a change to be made to meta data corresponding to a ~~the content track associated with a particular medium;~~

identifying a file associated with the content ~~track~~, wherein the file stores a copied version of the data in the content ~~track~~;

changing, based on the indication, meta data corresponding to the content ~~track~~; and

changing, based on the indication, meta data corresponding to the file; and  
saving an indication of the altered meta data.

39. (Currently Amended) A computer-implemented method as recited in claim 38, wherein the content track comprises an audio track.

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40. (Currently Amended) A computer-implemented method as recited in claim 38, wherein the content track comprises an audio/video track.

41. (Currently Amended) A computer-implemented method as recited in claim 38, wherein the content track comprises a video track.

42. (Currently Amended) A computer-implemented method as recited in claim 38, wherein the particular medium comprises a particular compact disc (CD).

43. (Currently Amended) A computer-implemented method as recited in claim 38, wherein the particular medium comprises a particular digital versatile disc (DVD).

44. (Currently Amended) A computer-implemented method as recited in claim 38, wherein the particular medium comprises a particular optical disc.

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45. (Currently Amended) One or more computer-readable memories containing a computer program that is executable by a processor to perform acts of:

maintaining meta data associated with a plurality of pieces of content stored on a plurality of pieces of media;

maintaining meta data associated with another plurality of pieces of content, wherein each of the other plurality of pieces of content is a ripped version of a respective one of the plurality of pieces of content in the corresponding one of the plurality of pieces of content;

automatically altering the meta data associated with one of the other plurality of pieces of content in response to the meta data associated with the corresponding one of the plurality of pieces of content being altered;

receiving an indication of a change to be made to meta data corresponding to a ~~the content track associated with a particular medium;~~

identifying a file associated with the content track, wherein the file stores a copied version of the data in the content ~~track;~~

automatically changing, based on the indication, meta data corresponding to the content ~~track;~~ and

automatically changing, based on the indication, meta data corresponding to the file; and

saving an indication of the altered meta data.

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46. (Currently Amended) One or more computer-readable memories containing a computer program that is executable by a processor to manage meta data corresponding to media content by performing acts of:

maintaining a set of disc identifiers;

for each disc identifier, maintaining a set of corresponding children objects, wherein each of the children objects corresponds to a track on the disc associated with the disc identifier, wherein one or more disc identifiers in the set of disc identifiers is one of a compact disc (CD) identifier and a digital versatile disc (DVD) identifier, wherein the disc identifier is formed using 64-bit Cyclical Redundancy Checking (CRC) of portions of the DVD comprising a first 64 Kb of the DVD including one or more of: video\_ts.ifo and vts\_01\_0.ifo;

for each of one or more of the individual children objects, maintaining a set of additional objects, wherein each additional object corresponds to a file associated with the track corresponding to the child object;

automatically associating, for each of the one or more individual children objects, the set of additional objects with the child object, wherein the set of additional objects correspond respectively to a copy of an associated one of the tracks;

propagating, to the set of additional objects, any changes made to meta data corresponding to the child object; and

receiving an indication to change meta data associated with one track on the disc;

automatically altering, in response to the indication, meta data associated with the child object corresponding to the one track; and



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automatically altering, in response to the indication, meta data associated with the additional object corresponding to the child object corresponding to the track; and

saving an indication of a relationship between the plurality of tracks on the disc and corresponding to tracks associated with the other disc.

47. (Previously Presented) A memory as recited in claim 46, the computer program further being executable to cause the processor to perform acts comprising associating meta data with each child object and each additional object.

48. (Currently Amended) A memory as recited in claim 46, wherein the disc identifier is formed using 64-bit CRC ~~Cyclical Redundancy Checking~~) of portions of the DVD.

49. (Cancel).

2. The following is an examiner's statement of reasons for allowance:

The present invention is directed to a method for meta data management for media content objects wherein meta data associated with multiple pieces of content stored on multiple pieces of media is maintained in a metadata store. The meta data store also includes meta data associated with other pieces of content stored elsewhere. This association is maintained in the data store, so that whenever a change is made to meta data for one piece of content, then the meta data for the associated pieces is also changed.

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Claims 1, 8, 9, 17, 19, 21, 26, 27, 33, 34, 38, 45, 46 identify the uniquely distinct step of:

maintaining meta data associated with another plurality of pieces of content, wherein each of the other plurality of pieces of content is a ripped version of a respective one of the plurality of pieces of content in the corresponding one of the plurality of pieces of content; automatically altering the meta data associated with one of the other plurality of pieces of content in response to the meta data associated with the corresponding one of the plurality of pieces of content being altered.

In contrast, the closest prior arts, Chasen et al. (US Patent 6,035,412) discloses a substantially similar method that includes the steps of changing to at least a portion of the subset of metadata is received and displayed to the user, and determining whether the portions of the hierarchical display of metadata that are affected by the change and update those portions, but fails to teach the meta data for one version (i.e. plurality of pieces of content) is altered in response to the meta data for the other version (other plurality of pieces of content), and thus fails to anticipate or render the above-cited limitations obvious.

Thus, prior art of record neither renders obvious nor anticipates the combination of claim elements in light of the specification.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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*Conclusion*

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (571) 272-4112. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham, can be reached on (571) 272-7079. The fax number to this Art Unit is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Miranda Le  
December 07, 2006



JOHN COTTINGHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100